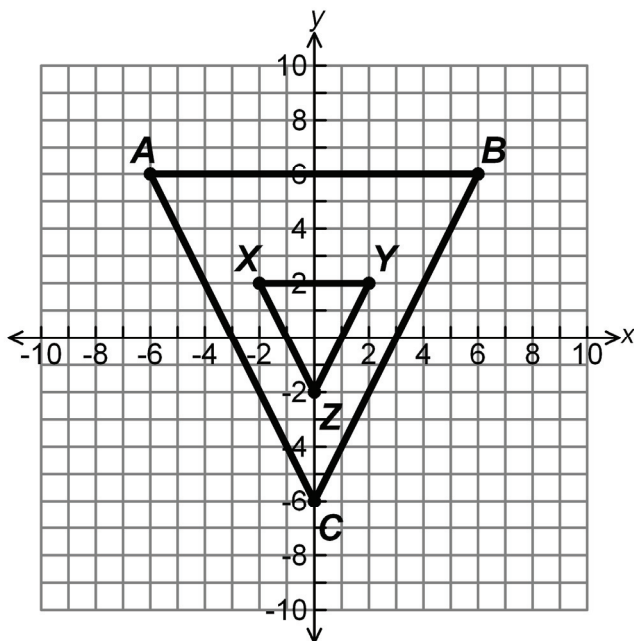




- 1 Triangle ABC was dilated to form triangle XYZ .

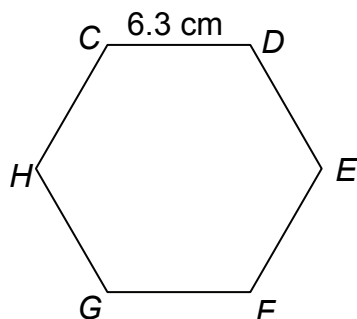


Which number best represents the scale factor used to change triangle ABC into triangle XYZ ?

- A $\frac{1}{3}$
- B $\frac{1}{2}$
- C 2
- D 3



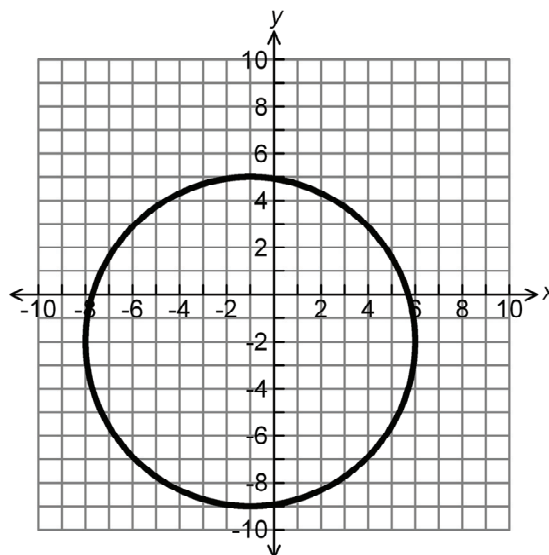
- 2 Regular hexagon $CDEFGH$ is dilated using a scale factor of $\frac{1}{2}$.



What is the length of each side of the dilated hexagon?

- A 3.15 cm
- B 3.5 cm
- C 6.8 cm
- D 12.6 cm

- 3 A circle with a center at $(-1, -2)$ and a radius of 7 units is shown below.

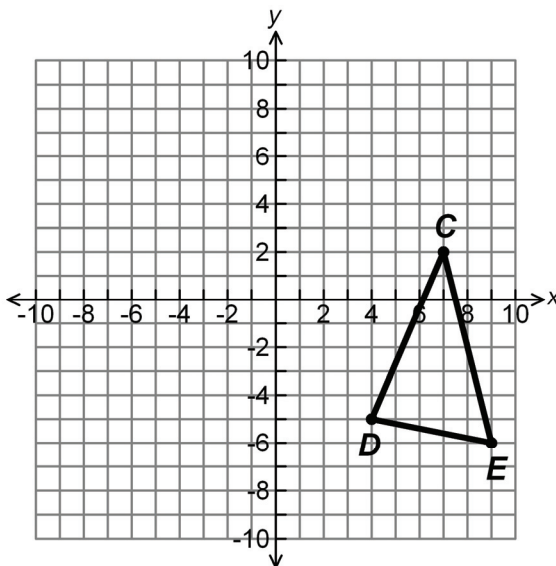


If the circle is translated 5 units to the right and 3 units up, what will be the coordinates of the center of the translated circle?

- A $(-1, -2)$
- B $(4, -2)$
- C $(4, 1)$
- D $(-6, 1)$



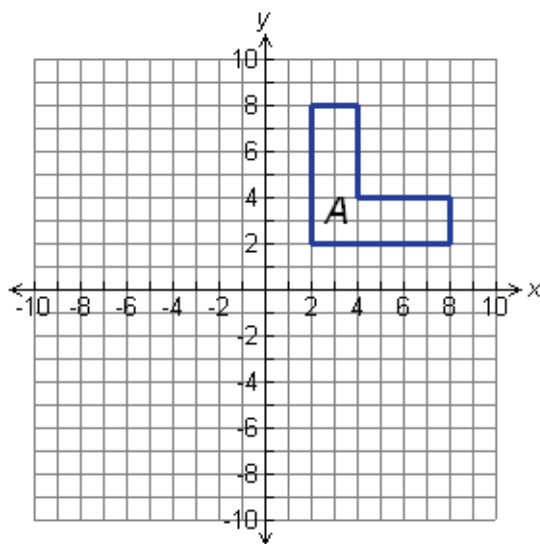
- 4 If $\triangle CDE$ is reflected across the x -axis, what will be the coordinates of point D' ?



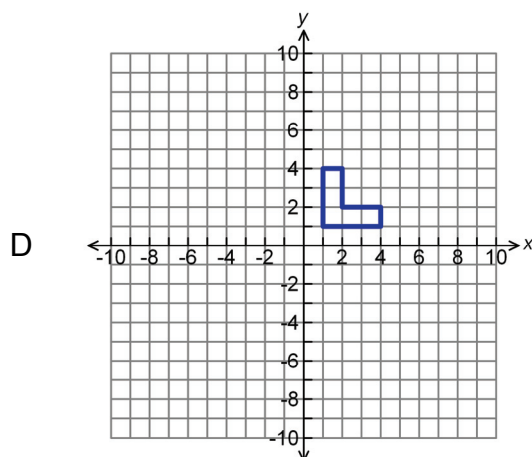
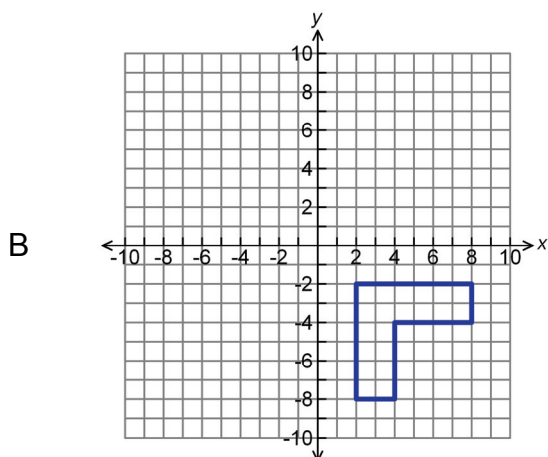
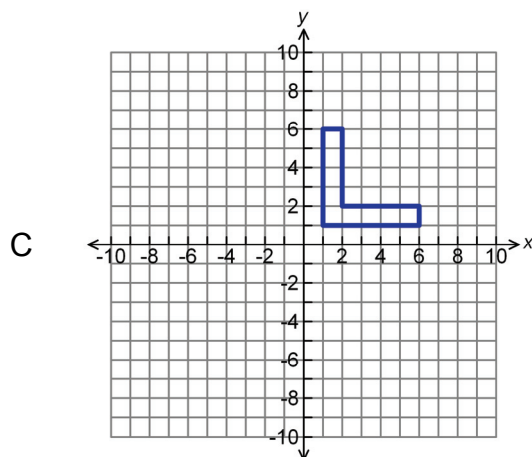
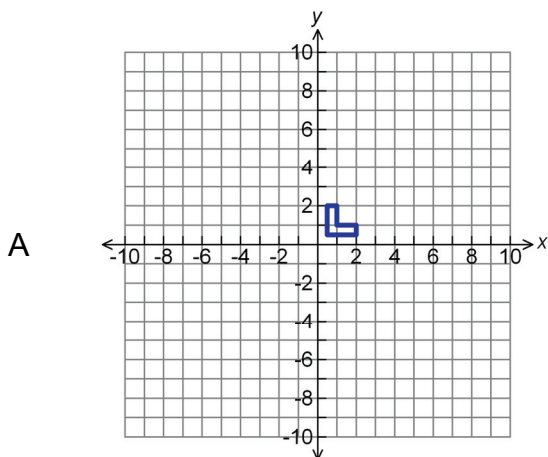
- A $(-5, 4)$
- B $(-4, -5)$
- C $(4, 5)$
- D $(5, -4)$



- 5 Figure A is shown on the coordinate grid below.

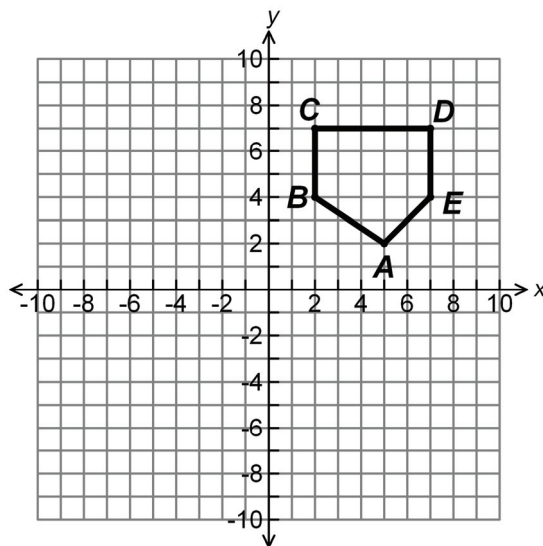


Which coordinate grid shows a dilation of Figure A after a scale factor of $\frac{1}{2}$ has been applied?

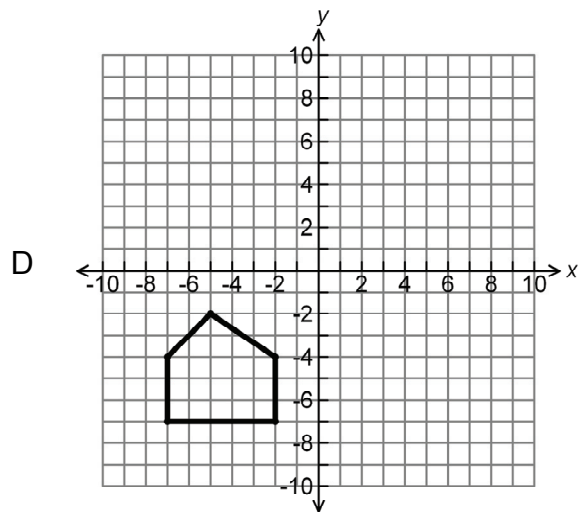
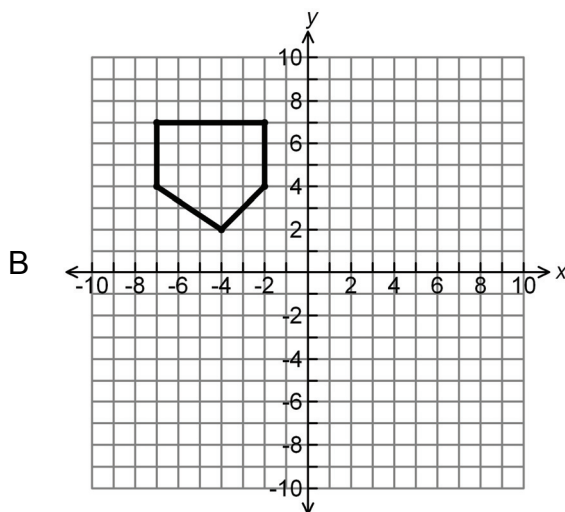
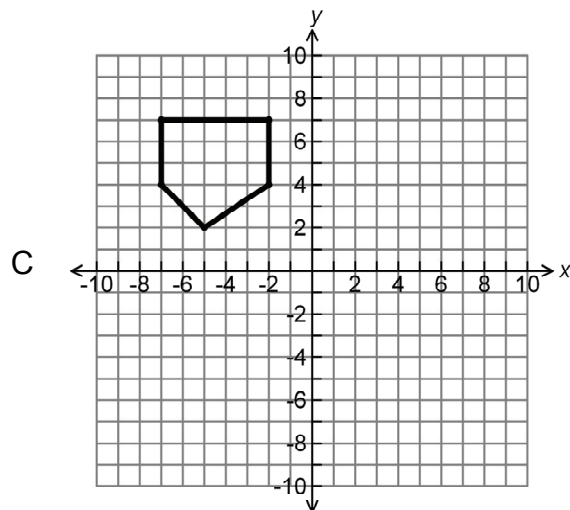
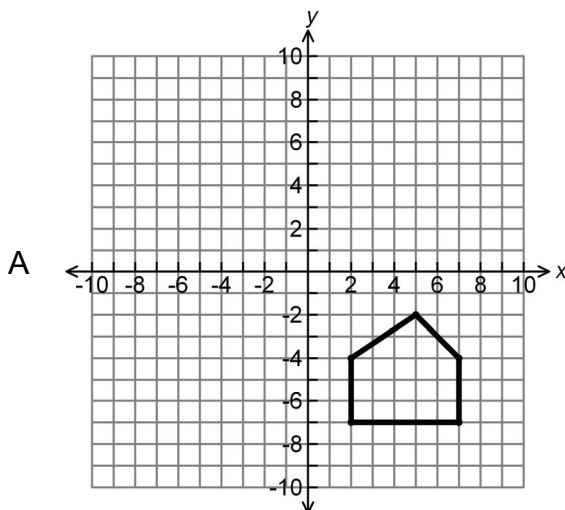




- 6 Polygon $ABCDE$ is shown on the coordinate grid below.

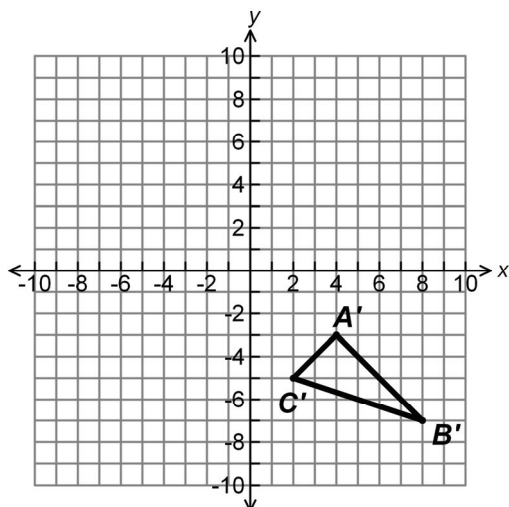


Which coordinate grid shows the reflection of polygon $ABCDE$ across the y -axis?





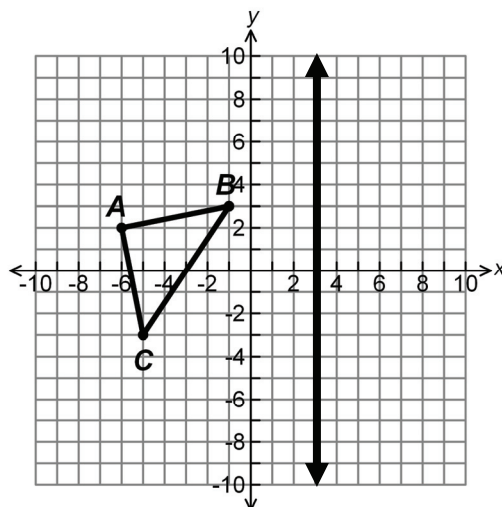
- 7 Triangle $A'B'C'$ shown below is the result of a translation of 5 units right and 4 units down.



What was the original coordinate of point A?

- A (9, -7)
- B (0, 2)
- C (1, -1)
- D (-1, 1)

- 8 If $\triangle ABC$ is reflected across the bold vertical line, what will be the coordinates of B' ?



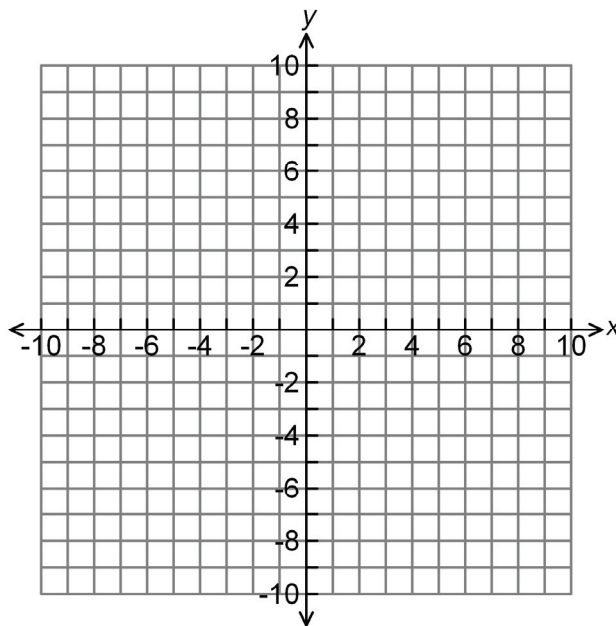
- A (1, 3)
- B (7, 3)
- C (-1, 3)
- D (3, 7)

- 9 Anthony was using graphic design software. He drew a square such that each side of the square measured 3 centimeters. If he wants to dilate the square using a scale factor of 2.5, what will be the length of each side of the dilated square?

- A 0.5 cm
- B 5.5 cm
- C 6.5 cm
- D 7.5 cm



- 10 A circle with a radius of 4 units has its center at $(-1, -2)$ on a coordinate grid.

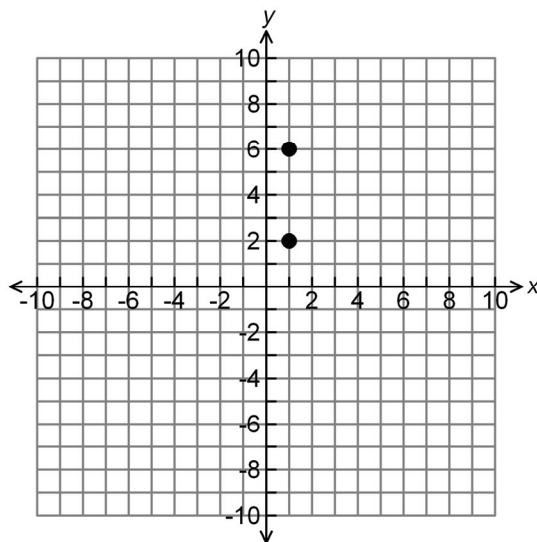


If the center is translated 3 units to the right and 4 units down, what will be the coordinates of the new center?

- A $(4, 6)$
- B $(2, -6)$
- C $(-4, 2)$
- D $(2, 2)$



- 11 A rectangle with a perimeter of 24 units is to be drawn on the grid below. If two of the vertices are shown on the grid, which of the ordered pairs listed below could be coordinates of the other two vertices?



- A (4, 2), (4, 6)
- B (9, 2), (9, 6)
- C (3, 2), (3, 6)
- D (-2, 2), (-2, 6)